

MARKETING RESEARCH DEPARTMENT REPORT

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MRD #: _____

DATED: August 20, 1981WRITTEN BY: Jerry IsaacsSUBJECT: HTI Test of an Experimental Merit Ultra Lights
100 mm Model Versus Production Cambridge 100 mm
(Project No. 4804/5146)

OVERVIEW

Overall, the low tar 100 mm NMF smokers significantly preferred the Merit Ultra Lights 100 mm Model (5.0 mg tar) (74%) to Production Cambridge 100 (3.4 mg tar) (26%). Qualitatively, these smokers perceived Merit Ultra Lights 100 as having "more taste", "better taste", "easier draw", "better aftertaste", "a better filter", and being "cooler".

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FILE: MERIT

HTI TEST OF AN EXPERIMENTAL
MERIT ULTRA LIGHTS 100 MM MODEL VERSUS
PRODUCTION CAMBRIDGE 100 MM

BACKGROUND

The purpose of this test was to determine the consumer acceptability of an experimental Merit Ultra Lights 100 mm Model relative to production Cambridge 100 mm. Analytically, the two products differed in that the Merit Ultra Lights had a higher tar delivery (5.0 vs. 3.4 mg.). This test was conducted via mail placement/mail questionnaire among low-tar 100 mm NMF smokers. Both products were tested "blind" in plain white coded packages.

FINDINGS

Low Tar 100 mm NMF Smokers

1. Among low tar 100 mm NMF smokers, the overall preference vote was 74% for the experimental Merit Ultra Lights 100 mm model versus 26% for production Cambridge 100 mm. This vote, which is significant at the 95% level, was consistent across all demographic subgroups.

(See Table 1, Sections A & B)

2. The average ratings assigned by these smokers on a "worst" (0) to "best" (100) scale are consistent with the overall preference vote in that the Merit Ultra Lights model (49.03) was rated significantly (at the 95% level) higher than production Cambridge 100 (33.44).

(See Table 1; Section C)

3. A review of the available qualitative information (Comparisons - Table 1; Section D; Reasons For Preference - Table 2; and Dislikes - Table 3) indicates that these low tar smokers perceived Merit Ultra Lights 100 as having "more taste", "better taste", "easier draw", "better aftertaste", "a better filter" and being "cooler". Production Cambridge 100 was perceived as being "milder".

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Smokers Of:
Low-Tar 100 mm NMF
N = (304)
%

Prefer Production Cambridge 100	21 (26)
Prefer Experimental Merit Ultra Lights 100	59* (74)
No Preference	20

SECTION B: % PREFERRING EXPERIMENTAL
(Percentage Among Those Having A Preference)

	Base (242)	% Preferring Merit Ultra Lights 100 74*
Total		
Men	(66)	77*
Women	(176)	73*
Under 35 years	(72)	76*
35 years and over	(170)	73*
Moderate/light smokers	(175) (67)	75* 72*

SECTION C: AVERAGE RATINGS
(0=Worst; 100=Best)

Smokers Of:
Low-Tar 100 NMF
(304)

Prefer Production Cambridge 100	33.44
Prefer Experimental Merit Ultra Lights 100	49.03*

SECTION D: COMPARISON FOR SPECIFIC QUALITIES (%)

Smokers Of Low Tar 100 mm NMF

<u>Production</u>	<u>Merit Ultra</u>	<u>No Difference</u>
<u>Cambridge 100</u>	<u>Lights 100</u>	<u>(304)</u>

N = ----- (304) -----

Has more taste	20	58*	23
Has a better taste	20	55*	25
Is harsher to the mouth/throat	24	17	59
Has an easier draw	13	52*	35
Has a better aftertaste	17	35*	48
Is cooler	17	25**	58
Is slower burning	26	21	53
Is milder	42*	26	32
Has a better filter	7	20*	72
Has a lighter taste	36	23	36

* Significant at the 95% confidence level.

**Significant at the 90% confidence level.

TABLE 1

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REASONS FOR PREFERENCE

	Smokers Of Low Tar 100 mm NMF	
	Preferred Cambridge	Preferred Merit Ultra Lights
Base: Those preferring either cigarette	(63) #	(179) #
<u>Taste</u>	48	117
Good taste/tobacco flavor	22	49
Strong flavor	14	42
Good aftertaste/no bad aftertaste	9	16
Mild flavor/not harsh	--	14
<u>Strength</u>	18	29
Mild, not strong	16	18
Stronger	1	9
<u>Burning Qualities</u>	11	18
Slower burning	10	11
<u>Ease In Smoking</u>	10	80
Easy draw, smoke	8	74
Even drawing	2	7
<u>Filter</u>	3	6
<u>Effect On Mouth and Throat</u>	2	7
<u>Physical Characteristics</u>	1	4
<u>Coolness</u>	1	1
<u>Miscellaneous</u>	4	25
Satisfying	1	11
Similar/same as regular brand	--	7

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TABLE 2

DISLIKES ABOUT EACH CIGARETTE

Base:	Smokers Of Low Tar 100 mm NMF		
	Cambridge 100	Merit Ultra Lights	100
	<hr/> ----- -304-----		
	#	#	#
<u>Taste</u>			
Flavor too mild/not enough flavor	126	83	83
Poor flavor/disliked taste/no true tobacco taste	84	46	46
Left bad aftertaste	20	16	16
Flavor too strong	17	13	13
	5	4	4
<u>Difficulty In Smoking</u>	115	39	39
Not easy drawing/didn't smoke well	111	32	32
<u>Burning Qualities</u>	57	64	64
Burned too fast	28	59	59
Didn't burn well	12	2	2
Didn't stay lit	10	--	--
<u>Strength</u>	35	29	29
Too mild	19	18	18
Too strong, not mild enough	15	11	11
<u>Effect On Mouth and Throat</u>	17	17	17
Irritated mouth and throat/burned throat	13	10	10
<u>Physical Characteristics</u>	9	12	12
<u>Coolness</u>	--	1	1
<u>Miscellaneous</u>	21	20	20
Not satisfying	14	12	12

TABLE 3

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OVERALL PREFERENCE
WEIGHTED
(4804/5146)

Sample: Low Tar 100 mm NMF Smokers -

	N =	Actual Preference Scores <u>(304)</u> <u>%</u>	Weighted Preference Scores <u>(304)</u> <u>%</u>
Preferred Production Cambridge 100		21	20
Preferred Merit Ultra Lights 100 Model		59	60
No Preference		20	20

Weighted Procedure:

- Equal treatment for orders of trial.
- Incoming sample weighted to age within sex profile for corresponding sample composition.

APPENDIX
TABLE A

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COMPARISON FOR SPECIFIC VALUES
(4804/5146)

	Smokers Of: Low Tar 100 mm NMF Cigarettes		
	Traditional Analysis		Budne Analysis
	Production	MUL 100	Production
	Cambridge 100	Model	Cambridge 100
Has more taste		*	*
Has a better taste		*	NS
Is harsher to mouth/throat	NS		NS
Has an easier draw		*	*
Has a better aftertaste		*	NS
Is cooler		**	NS
Is slower burning	NS		*
Is milder	*		*
Has a better filter		*	*
Has a lighter taste	NS		*

NS = Not Significant

* Significant at the 95% confidence level.

** Significant at the 90% confidence level.

APPENDIX
TABLE B

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FROM: Elizabeth Chambers /

SUBJECT: HTI 4804/5146

Requested by L. Fondren

4804 = M1BL = Red S53 and Black W57 = Control Cambridge 100 Cigarettes

5146 = M1BM = Red W57 and Black S53 = Experimental Merit Ultra Lights 100-Cigarettes

The experimental Merit Ultra Lights 100 cigarettes (M1BM) were different from the control Cambridge 100 cigarettes (M1BL) in the following characteristics: tar and nicotine deliveries, puff count, filter efficiency, total and filter RTD, filter dilution, and total alkaloids.

	<u>Control</u>	<u>Experimental</u>
	<u>Cambridge 100</u>	<u>Merit Ultra Lights 100</u>
ITEM Code	M1BL	M1BM
HTI#	4804	5146
<u>Smoke</u>		
Butt Length, mm	39	39
FTC Tar, mg/cigt.	3.4	5.0
Nicotine, mg/cigt.	0.30	0.37
Puffs/cigt.	9.4	8.0
Filtration Eff., %	70	65
<u>Cigarette</u>		
Total RTD, in. of H ₂ O	5.5	4.9
Static Burn. Time, min.	6.5	6.0
Length, mm	99.7	99.7
Circumference, mm	24.7	24.6
<u>Paper</u>		
Additive, type	Cit.	Cit.
Porosity, sec.	14	12
<u>Filter</u>		--
RTD, in. of H ₂ O	6.6	5.9
Length, mm	31.6	31.6
Weight, g	0.23	0.22
Tipping paper length, mm	36	36
Dilution, %	62	52
<u>Filler</u>		
Total alkaloids, %	1.98	1.76
Total reducing sugars, %	3.8	3.6
Wt. of tob., g	0.670	0.661
Rod Density, g/cc	0.203	0.202
EC:rrs		
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